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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listings of the Claims:

Please amend the subject application as follows:

156-158. (Canceled)

159. (Previously Canceled)

160-183. (Canceled)

- 184. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein comprises an Caenorhabditis elegans Gaq G protein from which five contiguous amino acids beginning with the C-terminal amino acid have been deleted and replaced by five contiguous amino acids present in a human G protein beginning with the C-terminal amino acid of such human G protein; provided that upon activation the chimeric G protein produces a $G\alpha q$ second messenger response and wherein the $G\alpha q$ second messenger response comprises release of intracellular calcium orcalcium mobilization.
- 185. (New) The nucleic acid of claim 184, wherein the human G protein is a human G α z G protein or a human G α i 3 G protein.
- 186. (New) The nucleic acid of claim 184, wherein the chimeric G protein has the amino acid sequence of SEQ ID NO: 1 or SEQ ID NO: 5.

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- (New) An isolated nucleic acid encoding a chimeric G 187. protein, wherein the chimeric G protein comprises an Caenorhabditis elegans Goq G protein from which nine contiguous amino acids beginning with the C-terminal amino acid have been deleted and replaced by nine contiguous amino acids present in a human G protein beginning with the C-terminal amino acid of such human G protein; provided that upon activation the chimeric G protein produces a Gog second messenger response and wherein the $G\alpha g$ second messenger response comprises release of intracellular calcium or calcium mobilization.
- 188. (New) The nucleic acid of claim 187, wherein the human G protein is a human G α z G protein or a human G α z G protein.
- 189. (New) The nucleic acid of claim 187, wherein the chimeric G protein has the amino acid sequence of SEQ ID NO: 2 or SEO ID NO: 3.
- 190. (New) An isolated nucleic acid encoding a chimeric G protein, wherein the chimeric G protein has the amino acid sequence of SEQ ID NO: 4 or SEQ ID NO: 41.